#### FIRE ALARM DEMOLITION NOTES:

- 1. THE CONTRACTOR SHALL INCLUDE IN HIS BID ALL COSTS ASSOCIATED WITH RELOCATION AND REMOVAL OF FIRE ALARM SYSTEM WORK AS DESCRIBED IN THE DRAWINGS AND SPECIFICATIONS WITH ALLOWANCES FOR EXPECTED OR UNFORESEEN ISSUES WHEN CONCEALED WORK HAS BEEN EXPOSED. NO ADDITIONAL CLAIMS FOR WORK ASSOCIATED WITH DEMOLITION WILL BE ACCEPTED, UNLESS, IN CERTAIN CASES, CONSIDERED JUSTIFIABLE BY THE ENGINEER.
- 2. NOTE THAT THE FACILITY WILL BE FULLY OPERATIONAL DURING THE COURSE OF THIS
- 2.1. THE CONTRACTOR IS TO COORDINATE ALL OF THE DEMOLITION WORK WITH THE FACILITY PERSONNEL TO MINIMIZE DISTURBING THE OPERATING EQUIPMENT, WIRING AND SYSTEMS.
- 2.2. THE CONTRACTOR SHALL PERFORM REMOVAL AND DEMOLITION WORK WITH MINIMAL INTERFERENCE WITH EXISTING SYSTEMS.
- DEMOLITION AND REMOVAL OF WORK SHALL BE PERFORMED IN A NEAT AND PROFESSIONAL MANNER. THE CONTRACTOR SHALL RESTORE, PATCH, PAINT, ETC., ANY INTERIOR/EXTERIOR BUILDING SURFACE TO ITS ORIGINAL CONDITION.
- REFER TO FIRE ALARM PLANS FOR NEW EQUIPMENT AND DEVICE LAYOUTS AND EXTENT OF EQUIPMENT BEING REPLACED, RELOCATED, OR REMOVED. COORDINATE WITH ALL TRADES AS TO EXTENT OF EQUIPMENT BEING REMOVED OR RELOCATED. CLOSELY COORDINATE THE EXTENT OF DEMOLITION SCOPE OF WORK WITH ARCHITECT, ENGINEER AND/OR MECHANICAL PLANS. PATCH AND PAINT (TO MATCH SURROUNDING CONDITIONS) ALL OPENINGS CREATED BY THIS DEMOLITION.
- EXISTING CONDITIONS, EQUIPMENT, MATERIALS & SIZES ARE SHOWN FOR REFERENCE ONLY. VERIFY EXISTING CONDITIONS AND BRING ANY DISCREPANCIES TO THE ENGINEER'S ATTENTION IN WRITING PRIOR TO BID SUBMISSION.
- ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FIRE ALARM SYSTEM DEMOLITION WORK FOR THIS PROJECT WHETHER OR NOT SPECIFICALLY INDICATED ON THIS OR OTHER DEMOLITION PLANS. THIS WORK SHALL INCLUDE BUT IS NOT LIMITED TO THE DISCONNECTION, REMOVAL AND DISPOSAL OF; INITIATION AND NOTIFICATION DEVICES, JUNCTION BOXES, WIRE, CABLE, CONDUIT, MOUNTING HARDWARE STRAPS OR CABLES, ETC. PER THE SCOPE OF WORK FOR THIS PROJECT.
- THE ELECTRICAL CONTRACTOR SHALL REMOVE ALL FIRE ALARM DEVICES, INCLUDING ASSOCIATED WIRING, CONDUITS, COVERS, BOXES, ETC., WHERE INDICATED ON THE PLANS. WHERE THE REMOVAL OF THESE ITEMS DISRUPTS EXISTING WIRING THAT IS TO REMAIN, THE CONTRACTOR SHALL INSTALL IN THE CEILING SPACE; JUNCTION BOXES AND OTHER DEVICES AND PROVIDE BYPASS CONNECTIONS NECESSARY TO MAKE CIRCUITS AFFECTED CONTINUOUS AND READY FOR OPERATION. OTHERWISE, WIRING SHALL BE REMOVED BACK TO THE NEAREST ELECTRICAL JUNCTION BOX THAT IS TO REMAIN OR TO THE SOURCE PANELBOARD.
- ALL WORK MUST BE SCHEDULED AND PERFORMED AS NOT TO INTERRUPT NORMAL OPERATIONS. REMOVAL OF ITEMS THAT WILL CAUSE ANY TYPE OF TEMPORARY SHUTDOWN SHALL BE PERFORMED DURING OFF-PEAK HOURS. ALL SUCH OUTAGES SHALL BE SCHEDULED AND COORDINATED WITH OWNER FIELD REPRESENTATIVE TO ENSURE ESSENTIAL SERVICES OR AREAS CAN BE MAINTAINED.
- THE CONTRACTOR SHALL NOTIFY THE OWNER AT THE APPROPRIATE TIME OF THE PROJECTED DEMOLITION AND PHASING SCHEDULE SO THAT REMOVAL OR RELOCATION OF AFFECTED UTILITIES MAY BE CARRIED OUT IN COORDINATION WITH THE PROJECT REQUIREMENTS. THE CONTRACTOR SHALL CLOSELY FOLLOW THE DEMOLITION AND PHASING SCHEDULE AND PROCEED IN THE SPECIFIED SEQUENCE.
- 10. THE SHUTDOWN OF EXISTING BUILDING FIRE ALARM SYSTEM SHALL BE COORDINATED WITH THE OWNER. MAKE APPROPRIATE ARRANGEMENTS AT LEAST 5 BUSINESS DAYS PRIOR TO A SHUTDOWN.
- 11. THE CONTRACTOR SHALL REMOVE AND/OR RELOCATE ALL EXISTING FIRE ALARM SYSTEM WORK WHICH INTERFERES WITH THE NEW SYSTEM AND ARCHITECTURAL LAYOUTS IN FULL COORDINATION WITH THE ENGINEER'S PLANS. ALL SYSTEMS WHICH ARE NO LONGER REQUIRED TO FUNCTION SHALL BE DE-ENERGIZED AND DISCONNECTED AT THE SOURCE.
- 12. ELECTRICAL CONTRACTOR SHALL PROVIDE AND MAINTAIN ANY CONNECTIONS / DISCONNECTIONS AS NEEDED TO ENSURE ADEQUATE SAFETY AND PROTECTION OF ALL PERSONNEL AND EQUIPMENT.
- 13. ALL FIRE ALARM PANELS AND NOTIFICATION APPLIANCE POWER EXTENDERS SHALL BE MAINTAINED AS WORKING PANELS THROUGHOUT CONSTRUCTION AND WILL CONTINUE TO MAINTAIN CIRCUITS FOR EXISTING DEVICES TO REMAIN. PROVIDE AS NECESSARY TEMPORARY FEEDS TO ANY DEVICES THAT MAY BE REQUIRED FOR UNINTERRUPTED USE. PROVIDE TEMPORARY CONNECTIONS FOR RELOCATED EQUIPMENT DURING CONSTRUCTION.
- 14. ELECTRICAL CONTRACTOR SHALL ENSURE THAT ANY DEVICES LOCATED OUTSIDE OF DEMOLITION WORK AREA ARE NOT AFFECTED BY REMOVAL OF WIRING AND/OR CIRCUITING. WIRING/CONDUIT SHALL BE LEFT IN A SAFE CONDITION, LABELED FOR ITS USE, AND EXTENDED AS REQUIRED TO MAINTAIN CIRCUIT CONTINUITY, INCLUDING ALL APPLICABLE CONTROLS.
- 15. PORTIONS OF INITIATION AND NOTIFICATION LOOP RUNS THAT SHALL BE REMOVED OR ABANDONED AS A RESULT OF DEMOLITION WORK, BUT WHICH ARE REQUIRED TO REMAIN ENERGIZED, SHALL BE CUT AT CONVENIENT LOCATIONS, REROUTED AND RECONNECTED. NEW LOOP EXTENSIONS SHALL MATCH EXISTING WIRING SPECIFICATIONS IN ALL ASPECTS INCLUDING BUT NOT LIMITED TO CABLE TYPE, CONDUIT SIZES, ETC..
- 16. ALL EXISTING LOW VOLTAGE WIRING FOR FIRE ALARM SYSTEMS THAT ARE NOT REUSED SHALL BE REMOVED IN ITS ENTIRETY BY THE RESPONSIBLE CONTRACTOR.
- 17. CONTRACTOR IS TO EXERCISE EXTREME CAUTION WHEN CUTTING SLAB TO AVOID DAMAGE TO ANY EXISTING CONDUITS, PIPING, ETC. THAT MAY BE CONCEALED IN OR BENEATH THE SLAB. ANY FLOOR SLAB AFFECTED BY THE REMOVAL OF DEVICES FED VIA UNDERGROUND CONDUIT OR WIRING, SHALL BE FIRESTOPPED AND PATCHED BY THE GENERAL CONTRACTOR AND TO MATCH SURROUNDING FLOOR.
- 18. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR DISCONNECTING, RELOCATING, AND/OR RECONNECTING ALL EXISTING EQUIPMENT THAT IS TO REMAIN, EVEN IF THIS EQUIPMENT IS NOT SHOWN ON PLANS OR SCHEDULES. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR EXTENDING EXISTING SYSTEM LOOPS FROM EXISTING EQUIPMENT THAT IS REMAINING TO NEW LOCATION.
- 19. IN THE EVENT THAT FIRE ALARM PLANS CALL FOR EXISTING WIRING TO BE REUSED, THE ELECTRICAL CONTRACTOR SHALL SURVEY EXISTING WIRING, BOXES, ETC. TO DETERMINE IF THE EXISTING WIRING MAY BE REUSED FOR NEW DEVICES (IF WIRING REMAINS IN IT'S ORIGINAL CONDUIT). ELECTRICAL CONTRACTOR SHALL DETERMINE THAT THE ENTIRE RUN OF EXISTING WIRING, FROM SOURCE TO DEVICE FOR WIRING TO BE REUSED, IS FEASIBLE FOR REUSE AND MEETS THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE, STATE AND LOCAL CODES HAVING JURISDICTION.
- 19.1. IN INSTANCES WHERE EXISTING WIRING IS TO BE EXTENDED OR REUSED, ELECTRICAL CONTRACTOR SHALL DISCONNECT EXISTING WIRING AND LEAVE IN A SAFE CONDITION (TAG AND LABEL ITS USE) FOR FUTURE RECONNECTION DURING RENOVATION PHASE.
- 20. ALL UNUSED OUTLET BOXES THAT ARE TO REMAIN SHALL BE PROVIDED WITH MATCHING BLANK COVERS.
- 21. ALL RACEWAYS WHICH ARE EXPOSED AS A RESULT OF NEW WORK SHALL BE REMOVED AND REROUTED CONCEALED BEHIND FINISHED SURFACES.
- 22. EXISTING RACEWAYS THAT ARE NOT BEING REUSED SHALL BE REMOVED BACK TO THE NEAREST JUNCTION OR PULLBOX, AND THE OPENINGS BLANKED.
- 23. ANY CONDUITS PENETRATING MASONRY SURFACES SHALL BE CUT INTO SURFACE, PATCHED, AND PAINTED TO MATCH SURROUNDINGS.
- 24. DISCONNECT, RELOCATE OR REMOVE ELECTRICAL INSTALLATIONS AND EQUIPMENT AS INDICATED BY PLANS AND AS REQUIRED BY CHANGES IN CONSTRUCTION. WHERE EXISTING ELECTRICAL INSTALLATIONS INTERFERE WITH NEW WORK AND WHERE SUCH INSTALLATIONS ARE TO REMAIN IN USE, THE NEW INSTALLATIONS SHALL BE RELOCATED AND/OR RECONNECTED TO COORDINATE WITH THE WORK INDICATED ON THE CONTRACT DRAWINGS. DETERMINE AND COORDINATE ALL EQUIPMENT LOCATIONS PRIOR TO INITIAL ROUGH-IN.

### FIRE ALARM DEMOLITION NOTES (CONT.):

NO COST APPLIED TO OWNER).

- 25. DISCONNECT AND RELOCATE/RECONNECT ANY ELECTRICAL LINES, DEVICES (INCLUDING FIRE ALARM DEVICES). ETC. AND REPAIR PULL BOXES THAT MAY BE DISTURBED DURING THIS RENOVATION. UNLESS NOTED OTHERWISE, ALL EXISTING ELECTRICAL WORK WHICH WILL NOT BE RENDERED OBSOLETE AND WHICH MAY BE DISTURBED DUE TO ANY CHANGES REQUIRED UNDER THE CONTRACT, SHALL BE RESTORED TO ITS ORIGINAL OPERATING CONDITION AT NO COST TO OWNER. IF ANY EQUIPMENT TO REMAIN IS DAMAGED DURING CONSTRUCTION, IT SHALL BE REPLACED WITH NEW (WITH
- 26. ALL MATERIALS AND EQUIPMENT TO BE DEMOLISHED ARE TO BE DISPOSED OF BY THE CONTRACTOR, UNLESS DIRECTED OTHERWISE BY THE OWNER. CONTRACTOR IS RESPONSIBLE FOR DISPOSAL OF ALL MATERIALS IN ACCORDANCE WITH LOCAL AND FEDERAL LAWS. ALL MATERIALS THAT ARE CONSIDERED TO BE RECYCLABLE ARE TO BE RECYCLED ACCORDINGLY BY THE CONTRACTOR.

## **GENERAL FIRE ALARM NOTES:**

INTO THE INSTALLED SYSTEM.

- 1. FIRE ALARM SYSTEM SHALL BE AN ADDRESSABLE TYPE SYSTEM, AND DEVICES SHALL BE INDIVIDUALLY ADDRESSED.
- MODIFICATIONS TO THE FIRE ALARM SYSTEM SHALL BE PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR'S FIRE ALARM VENDOR. PLANS REFLECT THE DESIGN INTENT ONLY AND ARE TO BE USED FOR DEVICE PLACEMENT ONLY. ALL MODIFICATIONS REQUIRED BY THE OWNER AND THE LOCAL FIRE OFFICIALS SHALL BE INCORPORATED
- 3. ALL COMPONENTS SHALL BEAR THE U.L. LABEL FOR FIRE SERVICE USE AND SHALL BE COMPATIBLE FOR USE WITH ALL INTERCONNECTING EQUIPMENT.
- PROVIDE PERMANENT, "TYPED" LABEL ON INSIDE OF ALL FIRE ALL CABINETS. INDICATE SPECIFIC DEDICATED POWER CIRCUIT FEEDING PANEL.
- 5. ALL FIRE ALARM SYSTEM JUNCTION BOXES AND CONDUITS SHALL BE PAINTED RED. COVER PLATES SHALL BE PAINTED RED AND MARKED 'FA' AS WELL AS INDICATING THE CONTENTS OF THE BOX.
- 6. INSTALLING CONTRACTOR SHALL RETURN ONE SET OF ACCURATELY MARKED DRAWINGS FOR 'AS BUILT' PURPOSES, WITH INSTALLED WIRING RUNS AND EQUIPMENT
- 7. FIRE ALARM CONTRACTOR SHALL UPDATE DRAWINGS AND GRAPHICS IN THE MAIN FIRE ALARM PANEL SHOWING THE LOCATIONS OF ALL FIRE ALARM DEVICES.
- 8. REFER TO DRAWING FA-601 FOR FIRE ALARM SYSTEM MATRIX SEQUENCE OF OPERATIONS, FIRE ALARM RISER DIAGRAM, AND ADDITIONAL INFORMATION. 9. THE COMPLETE SYSTEM SHALL BE INSTALLED IN STRICT CONFORMANCE WITH THE PROJECT SPECIFICATIONS, IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, NFPA72, A.N.S.I., A.D.A. REQUIREMENTS, NFPA 101, VA FIRE PROTECTION DESIGN MANUAL, AND ALL STATE AND LOCAL BUILDING CODES.
- 10. FIRE ALARM SYSTEM VENDOR SHALL BE RESPONSIBLE FOR OBTAINING ALL INSPECTIONS RELATING TO THE SYSTEM INSTALLATION. THIS SHALL INCLUDE PAYING FOR ALL FEES AND SCHEDULING OF INSPECTION.
- 11. SHOP DRAWINGS SHALL BE PROVIDED TO THE ENGINEER PRIOR TO BEGINNING ANY WORK. SHOP DRAWINGS SHALL INDICATE WIRE COUNTS, CONDUCTOR TYPES, RACEWAY LOCATIONS AND SIZES, EQUIPMENT CATALOG NUMBERS, BATTERY CALCULATIONS, AND DESCRIPTIONS CLEARLY HIGHLIGHTED TO SPECIFICALLY INDICATE WHICH PRODUCTS ARE PROPOSED FOR USE. AFTER SATISFACTORY REVIEW BY THE COR AND SAFETY DEPARTMENT, WORK SHALL COMMENCE.
- 12. FIRE ALARM CONTRACTOR SHALL SUBMIT FIRE ALARM SHOP DRAWINGS (INCLUDING ALL TECHNICAL DATA SHEETS) THAT COMPLY WITH FIRE OFFICIAL'S OFFICE SYSTEM INSTALLATION REQUIREMENTS, TO THE FIRE MARSHAL WITHIN 30 DAYS OF PERMIT ISSUE, FOR FINAL PERMIT APPROVAL PRIOR TO START OF WORK.
- 13. AS-BUILT DRAWINGS SHOWING POINT BY POINT CONNECTIONS OF ALL DEVICES AND FINAL EQUIPMENT LOCATIONS SHALL BE PROVIDED TO OWNER UPON FINAL FIRE MARSHAL INSPECTION AND APPROVAL.
- 14. FINAL CONNECTIONS BETWEEN EQUIPMENT AND WIRING SYSTEM SHALL BE MADE UNDER DIRECT SUPERVISION OF A QUALIFIED TECHNICAL REPRESENTATIVE OF THE EQUIPMENT MANUFACTURER, WHO SHALL TEST THE SYSTEM COMPLETELY AND PROVIDE A CERTIFICATE IN WRITING AS TO THE PROPER INSTALLATION AND OPERATION OF THE FIRE ALARM SYSTEM PRIOR TO FINAL ACCEPTANCE OF THE SYSTEM BY THE
- 15. FIRE ALARM CONTRACTOR SHALL COORDINATE ALL SIGNAL DEVICE LOCATIONS AND MOUNTING HEIGHTS WITH FIXTURE PLAN, FIRE MARSHAL AND OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN.
- 16. FIRE ALARM CONTRACTOR SHALL UTILIZE FIRE RATED CABLE FOR FIRE ALARM SYSTEM. INSTALL CABLE PER NATIONAL ELECTRICAL CODE AND ALL STATE AND LOCAL CODES HAVING JURISDICTION. CABLE SHALL BE RUN PARALLEL OR PERPENDICULAR TO BUILDING STRUCTURE. ROUTE CABLES ABOVE BOTTOM CORD OF JOISTS, CONCEALED TO MAXIMUM EXTENT POSSIBLE.
- 17. THE MINIMUM SIZE CONDUIT SHALL BE PROVIDED AS REQUIRED BY TABLE 4 IN, CHAPTER 9, OF THE NATIONAL ELECTRIC CODE, USING ACTUAL CROSS SECTION AREA OF THE WIRING INSTALLED.
- 18. THE INSTALLER IS RESPONSIBLE FOR VERIFYING ALL WIRING IS CLEAR OF ANY GROUNDS, OPENS, OR SHORTS, AND THAT THE CIRCUITS ARE OF THE CORRECT RESISTANCE AND CAPACITANCE VALUES PRIOR TO TERMINATION OF WIRING TO FIRE ALARM EQUIPMENT. IN ADDITION, ALL WIRING MUST BE PROPERLY SUPPORTED.
- 19. TEE BARS SHALL BE USED TO SUPPORT JUNCTION BOXES IN SUSPENDED CEILING PANELS. LOCATE CABLE SO THEY DO NOT PREVENT REMOVAL OF PANELS.
- 20. ALL OPENINGS SHALL BE SEALED UPON COMPLETION OF INSTALLATION TO PREVENT THE SPREAD OF SMOKE AND FIRE THROUGH OPENINGS. OPENINGS SHALL ALSO BE SEALED TO PREVENT WATER SEEPAGE WHERE APPLICABLE. ALL OPENINGS SHALL BE COORDINATED WITH OTHER CRAFTS TO PREVENT INTERFERENCE AND OBSTRUCTION. PENETRATIONS THROUGH FIRE WALLS MUST BE MADE BY AN APPROVED THROUGH PENETRATION FIRESTOP SYSTEM.
- 21. CONDUIT RUNS SHOWN DIAGRAMMATIC. INSTALLER SHALL FIELD VERIFY ALL LENGTHS. DIMENSIONS, AND ARRANGEMENTS PRIOR TO COMMENCEMENT OF WORK. INSTALLER SHALL IDENTIFY INTERFERENCES BETWEEN WORK IN OTHER AREAS.
- 22. WIRING SHALL BE PER PLAN WITH RESPECT TO CONDUCTOR SIZE, TYPE, AND QUANTITY. CONDUCTORS SHALL BE PERMANENTLY MARKED FOR FUTURE IDENTIFICATION. PERMANENT WIRE MARKERS SHALL BE USED TO IDENTIFY THE TERMINATIONS OF ALL CONDUCTORS WITH THE FIRE ALARM CONTROL PANEL, PULL BOXES, AND OTHER PANELS (REFERENCE NEC 760.10).
- 23. REFER TO PLANS FOR DEVICE QUANTITIES AND LOCATIONS.
- 24. LOCATE DEVICES TO AVOID ANY CONFLICT WITH HVAC DUCTS, DIFFUSERS AND LIGHTING FIXTURES.
- 25. CONTRACTOR SHALL VERIFY LOCATION OF ALL NEW CEILING MOUNTED FIRE ALARM DEVICES WITH OTHER TRADES PRIOR TO INSTALLATION. LOCATION OF DETECTORS SHALL COMPLY WITH THE FOLLOWING: SHALL NOT BE CLOSER THAN 24 INCHES FROM ANY VERTICAL OBSTRUCTION (BEAM, COLUMN, A/C DUCT, ETC.) SHALL NOT BE CLOSER THAN 3 FT. FROM, NOR IN THE DIRECT PATH OF A SUPPLY REGISTER.
- 26. WHEN CEILING MOUNTED, SMOKE AND/OR HEAT DETECTORS SHALL BE MOUNTED NO CLOSER THAN 4" TO A SIDE WALL; OR WHEN WALL MOUNTED, NO HIGHER THAN 4" OR LOWER THAN 12" FROM THE TOP OF THE DETECTOR TO THE CEILING.
- 27. THE DUST COVERS FURNISHED WITH THE SMOKE DETECTORS MUST BE INSTALLED WITH EACH DEVICE UNTIL FINAL CHECKOUT (REFERENCE NFPA 72).
- 28. UPON COMPLETION OF THE RENOVATION, CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING UPDATED FACILITY MAPS AND ZONE SCHEDULES FOR BOTH BUILDINGS. MAPS SHOULD INDICATE LOCATION OF ALL FIRE ALARM DEVICES. DETAILED ZONE NUMBERS OR ADDRESSES AS REQUIRED. REFER TO FIRE ALARM SPECIFICATIONS FOR ADDITIONAL INFORMATION.

#### FIRE ALARM ABBREVIATIONS

RELOCATED EXISTING

RECESSED

REQUIRED

RECEPTACLE

REFLECTED CEILING PLAN

RIGID GALVANIZED STEEL

SHORT CIRCUIT CAPACITY

SERVICE ENTRANCE SECTION

INTERNATIONAL SYSTEM OF UNITS

SINGLE POLE, SINGLE THROW

ROOT MEAN SQUARE

SMOKE DETECTOR

SPECIFICATION

SWITCHBOARD

SWITCHGEAR

TIME CLOCK

TWISTED PAIR

UNDERFLOOR DUCT

UNDERGROUND

VOLT AMPERE

WATER HEATER

WEATHERPROOF

TRANSFORMER

TRANSFER

VOLT AMPERE REACTIVE

VARIABLE FREQUENCY DRIVE

TWISTED PAIR SHIELDED

TELEPHONE TERMINAL BOARD

UNDERWRITERS LABORATORY

UNLESS OTHERWISE NOTED

UNINTERRUPTIBLE POWER SUPPLY

TELEPHONE

TELEVISION

TYPICAL

UTILITY

VOLTAGE

SURFACE

SWITCH

SQUARE FOOT (FEET)

		FIRE ALARM ABBREVIATIONS		
PH P //C //C //C //C //C W	SINGLE-PHASE SINGLE POLE TWO-CONDUCTOR THREE-CONDUCTOR THREE-PHASE FOUR-CONDUCTOR FOUR-WIRE  AIR CONDITIONING UNIT ARCHITECT/ENGINEER ALARM ANNUNCIATOR PANEL ALTERNATING CURRENT OR ARMORED	FA FAAP FABL FABX FACP FC FI	FIRE ALARM FIRE ALARM ANNUNCIATOR PANEL FIRE ALARM BELL FIRE ALARM BOX FIRE ALARM CONTROL PANEL FOOTCANDLE FILM ILLUMINATOR FIXTURE	(RE) RCP REC RECPT RGS RM RMS REQD
C UNIT AP C	AIR CONDITIONING UNIT ARCHITECT/ENGINEER ALARM ANNUNCIATOR PANEL ALTERNATING CURRENT OR ARMORED CABLE ACCESSIBLE	FLA FLEX FLT FLUOR FLUOR FIX FOUTT	FULL LOAD AMPS FLEXIBLE METALLIC CONDUIT FLOODLIGHT FLUORESCENT FLUORESCENT FIXTURE TELEPHONE FLOOR OUTLET	SCC SES SD SF SHT
.DDL .DJ .DO .F .FC	ADDITIONAL ADJACENT, ADJOINING AUTOMATIC DOOR OPENER AMPERE FRAME OR AMP FUSE ABOVE FINISHED COUNTER, AUTOMATIC FREQUENCY CONTROL, OR AVAILABLE FAULT CURRENT	FVNR FVR	FIRE PROTECTION FEET OR FOOT FUSED SWITCH FULL VOLTAGE NON-REVERSING FULL VOLTAGE REVERSING GROUND OR GENERATOR	SI SPEC SPST SURF SW SWBD SWGR
IFF IFG IH IHJ IC	ABOVE FINISHED FLOOR ABOVE FINISHED GRADE AMPERE HOUR AUTHORITY HAVING JURISDICTION AMPERE INTERRUPTING CAPACITY	GEN GFCI GTB HID	GENERATOR GENERATOR GROUND FAULT CIRCUIT INTERRUPTER GROUND TERMINAL BOX HIGH INTENSITY DISCHARGE	TC TEL TP TPS
LT .MB OR A .MP .RCH .SC .T	ALTERNATE	HOA HP HT HZ IESNA	HAND-OFF-AUTOMATIC HORSEPOWER HEIGHT HERTZ ILLUMINATION ENGINEERING SOCIETY OF	TTB TV TYP UFD UGND
NTS NUTO V	AUTOMATIC TRANSFER SWITCH AUTOMATIC AUDIO VISUAL BATTERY	IMC INCAND IR IWH	NORTH AMERICA INTERMEDIATE METAL CONDUIT INCANDESCENT INFRARED INSTANTANEOUS WATER HEATER	UL UON UPS UTIL
BC BD BFF BIL	BARE COPPER BOARD BELOW FINISH FLOOR BASIC INSULATION LEVEL	J-BOX kV	JUNCTION BOX KILOVOLT	V VA VAR VFD
BLDG BPIP BRKR BYP	BUILDING BOILER PLANT INSTRUMENTATION PANEL BREAKER BY PASS	kVA kVAH kVAR kW kWH	KILOVOLT AMPERE KILOVOLT AMPERE PER HOUR KILOVOLT AMPERE REACTIVE KILOWATT KILOWATT HOUR KILOWATT HOUR KILOWATT HOUR	VOLT W WH WP
AB ALC AP AT CCR CCTV d CF/CI	CONDUIT CABINET CALCULATE CAPACITY CATALOG COMMUNITY ANTENNA TELEVISION CONTROL CONTACTOR CLOSED CIRCUIT TELEVISION CANDELA CONSTRUCTION DOCUMENTS CONTRACTOR FURNISHED CONTRACTOR FURNISHED/CONTRACTOR INSTALLED CONTRACTOR FURNISHED/OWNER	kWHM  LED  LF  LM  LP  LPS  LRA  LTCP  LT  LTG  LTG  LTNG  LV	LIGHT EMITTING DIODE LINEAR FEET (FOOT) LUMEN LIGHT POLE LOW PRESSURE SODIUM LOCKED ROTOR AMPS LOCAL TEMPERATURE CONTROL PANEL LIGHT LIGHTING LIGHTING LIGHTNING LOW VOLTAGE	XFER XFMR
FE CHWP CHWP CKT BRKR CLF COAX COMM COMPT CONC CONT CONT CONT CONT CONT CONT CON	INSTALLED CONTRACTOR FURNISHED EQUIPMENT CHILLED WATER CHILLED WATER PUMP CIRCUIT CIRCUIT BREAKER CURRENT LIMITING FUSE CEILING CONCRETE MASONRY UNIT COAX CABLE COMMUNICATION COMPARTMENT CONCRETE CONTINUE CONTRACTOR COORDINATE CONTROL POWER TRANSFORMER COLOR RENDERING INDEX CURRENT TRANSFORMER CABLE TELEVISION COPPER CUBIC FEET CURRENT	MATV MAX MC MCA MCB MCC MDP MECH MG MH MIN MOCP MLO MT MTD MTG MTS MV MVA MW NA NEC	MASTER ANTENNA TELEVISION SYSTEM MAXIMUM METAL—CLAD MINIMUM CIRCUIT AMPS MAIN CIRCUIT BREAKER MOTOR CONTROL CENTER MAIN DISTRIBUTION PANEL MECHANICAL MOTOR GENERATOR MANHOLE MINIMUM MAXIMUM OVERCURRENT PROTECTION MAIN LUGS ONLY MOUNT MOUNTED MOUNTING MANUAL TRANSFER SWITCH MEDIUM VOLTAGE MEGAVOLT—AMPERE MEGAWATT MICROWAVE  NOT APPLICABLE NATIONAL ELECTRICAL CODE	
B CCP EG C EG F EMO	DECIBEL OR DIRECT BURIAL DIRECT CURRENT DIMMER CONTROL PANEL DEGREES CELSIUS DEGREES FAHRENHEIT DEMOLITION	NEMA  NEUT OR N NFPA NIC NL	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION	

NO SCALE

NTS

PΒ

PCB

PEC

PEND

PTRV

PVC

NORMALLY OPEN

NOT TO SCALE

ON CENTER

OVERLOAD

OUTSIDE DIAMETER

PUBLIC ADDRESS

PUSHBUTTON

PEDESTAL

PENDANT

PHASE

POWER FACTOR

PANELBOARD, PULL BOX, OR

POLYCHLORINATED BIPHENYL

POWER OPERATED DAMPER

POTENTIAL TRANSFORMER

POWER TYPE ROOF VENTILATION

POLYVINYL CHLORIDE (PLASTIC)

PHOTOELECTRIC CELL

PREFABRICATED BEDSIDE PATIENT UNIT

#### FIRE ALARM SYMBOLS

FIRE ALARM CONTROL PANEL (MOUNT 6'-0" ABOVE FINISHED FLOOR TO TOP); PROVIDED WITH BACK-UP BATTERIES RATED FOR 24 HOUR MINIMUM SERVICE / 5 MINUTES IN ALARM MODE

FIRE ALARM TERMINAL CABINET (MOUNT 5'-0" ABOVE FINISHED FLOOR TO TOP)

FIRE ALARM REMOTE ANNUNCIATOR (MOUNT 5'-0" ABOVE FINISHED FLOOR TO TOP)

NOTIFICATION APPLIANCE CIRCUIT EXTENDER PANEL (MOUNT 6'-0" ABOVE FINISHED FLOOR TO TOP); PROVIDED WITH BACK-UP BATTERIES RATED FOR 24 HOUR MINIMUM SERVICE / 5 MINUTES IN ALARM MODE

MANUAL PULLSTATION (MOUNT 48" ABOVE FINISHED FLOOR TO TOP OF DEVICE)

DETECTOR: LETTER INDICATES AS FOLLOWS: P = PHOTOELECTRIC SMOKEIH = IONIZATION AND HEAT SMOKE IP = IONIZATION AND PHOTOELECTRIC SMOKE PH = PHOTOELECTRIC AND HEAT SMOKE IPH = IONIZATION, PHOTOELECTRIC, AND HEAT

DETECTOR, SMOKE, FOR DUCT (FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR; WIRED BY THE ELECTRICAL CONTRACTOR)

DUCT SMOKE DETECTOR REMOTE TEST SWITCH & ANNUNCIATOR

SPRINKLER ALARM VALVE TAMPER SWITCH (FURNISHED AND INSTALLED BY OTHERS; WIRED BY THE ELECTRICAL CONTRACTOR)

(FURNISHED AND INSTALLED BY OTHERS; WIRED BY THE ELECTRICAL CONTRACTOR) AUTO SYNC STROBE UNIT WITH SELECTABLE CANDELA

BELOW FINISHED CEILING TO TOP OF DEVICE)

SPRINKLER ALARM VALVE WATER FLOW SWITCH

s | Fire speaker unit

FIRE SPEAKER STROBE (AUTO SYNC) UNIT WITH SELECTABLE CANDELA; ADA COMPLIANT (MOUNT 80" ABOVE FINISHED FLOOR OR 6" BELOW FINISHED CEILING TO TOP OF DEVICE)

ADA COMPLIANT (MOUNT 80" ABOVE FINISHED FLOOR OR 6"

CONTROL MODULE

MONITORING MODULE

MAGNETIC DOOR HOLDER

ELECTROMAGNETIC DOOR RELEASE OR DOOR RELEASE RELAY

# **100% FOR CONSTRUCTION FULLY SPRINKLERED**









	Reviewed: Facility Manager			
'n.	Reviewed: Facility Director			
	Reviewed:			
	Reviewed:			

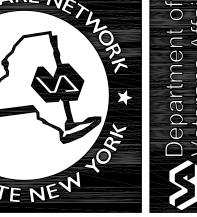
FIRE ALARM SYMBOLS AND NOTES Approved: Project Director

Drawing Title

**RENOVATION FOR 6C** 

12-04-2015 528A7-14-719 DRAWING NO. FA-00 Dwg. 70 Of





VA FORM 08-6231

Date

DISCONNECT

DISTRIBUTION

DOOR SWITCH

DISCONNECT SWITCH

EXISTING TO REMAIN

EQUIPMENT GROUND

ELECTRIC OR ELECTRICAL

EMERGENCY MONITORING CONTROL

ELECTROMAGNETIC INTERFERENCE

ELECTRICAL METALLIC TUBING

EMERGENCY POWER OFF

ELECTRIC WATER COOLER

ELECTRIC WATER HEATER

EXPLOSION PROOF

EMPTY CONDUIT

ELEVATION

FI FVATOR

**EMERGENCY** 

**ENCLOSURE** 

EASEMENT

EXISTING

DOUBLE POLE, DOUBLE THROW

DOUBLE POLE, SINGLE THROW

EXISTING TO BE RELOCATED

DIAGRAM

DISTR PNL DISTRIBUTION PANEL

DMR SW DIMMER SWITCH

DOWN

DRAWING

DFMO

DISC

DISTR

DPDT

DPST

DRSW

DWG

ELEC

EMCP

**EMER** 

ENCL

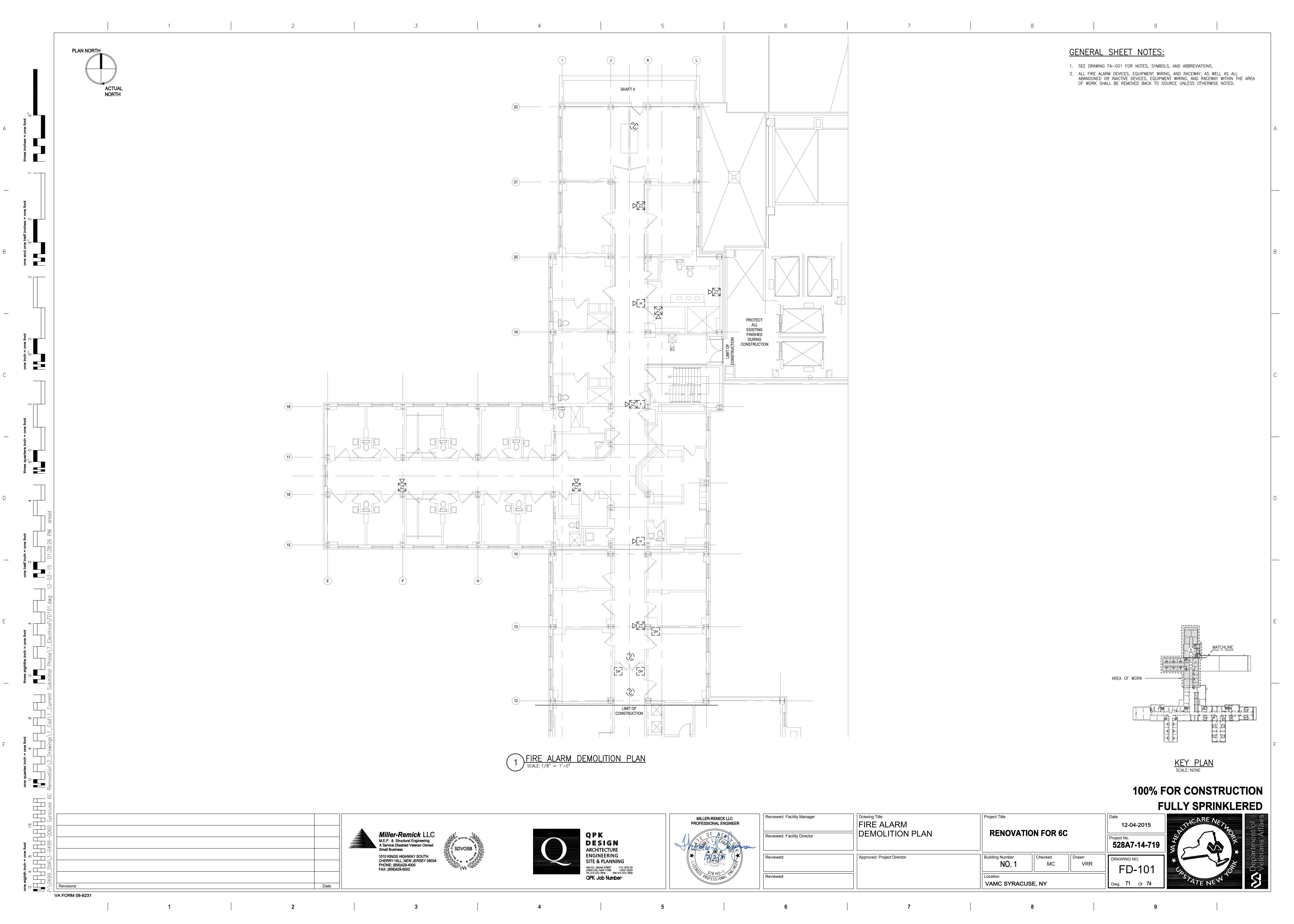
EPRF

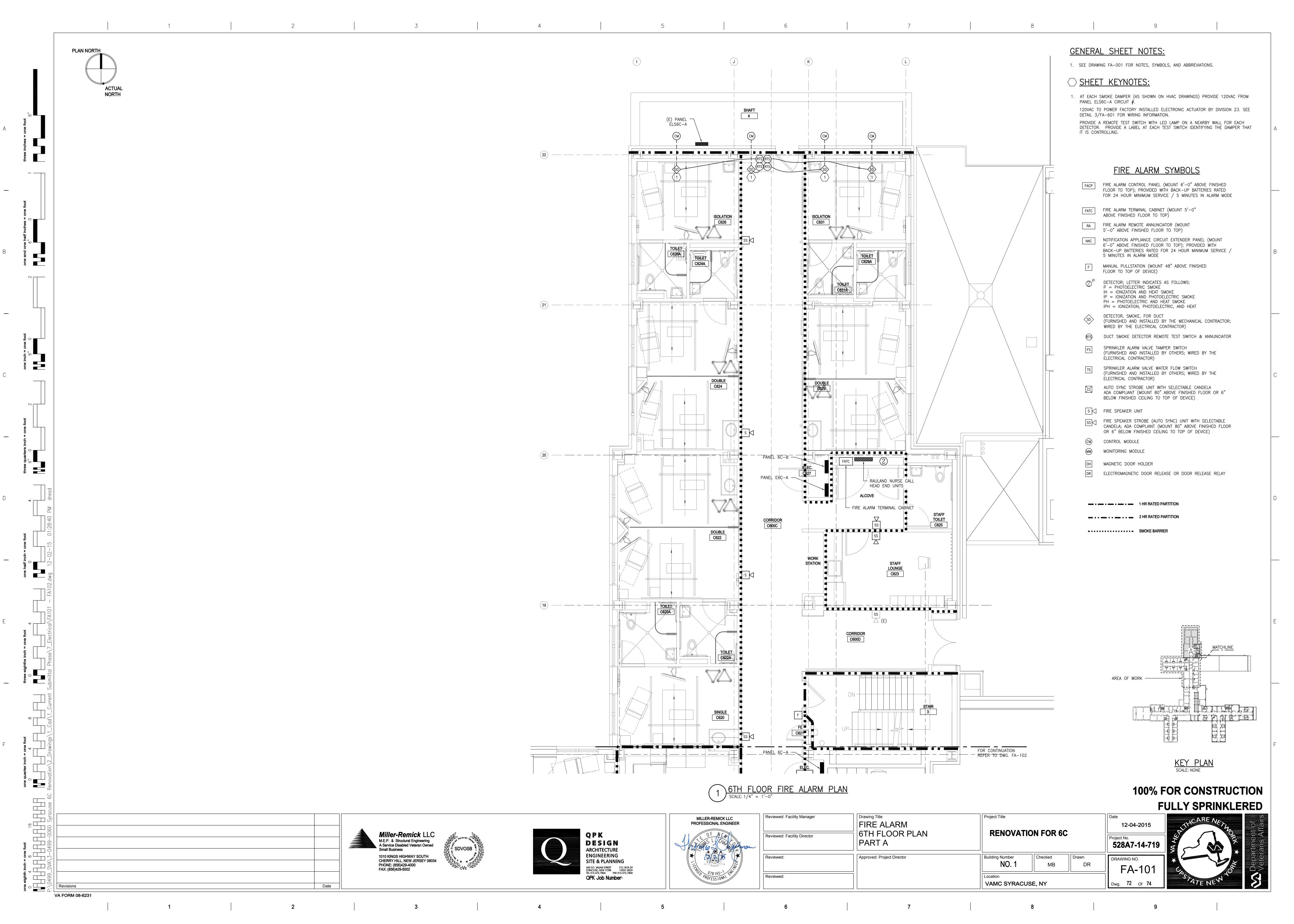
ESMT

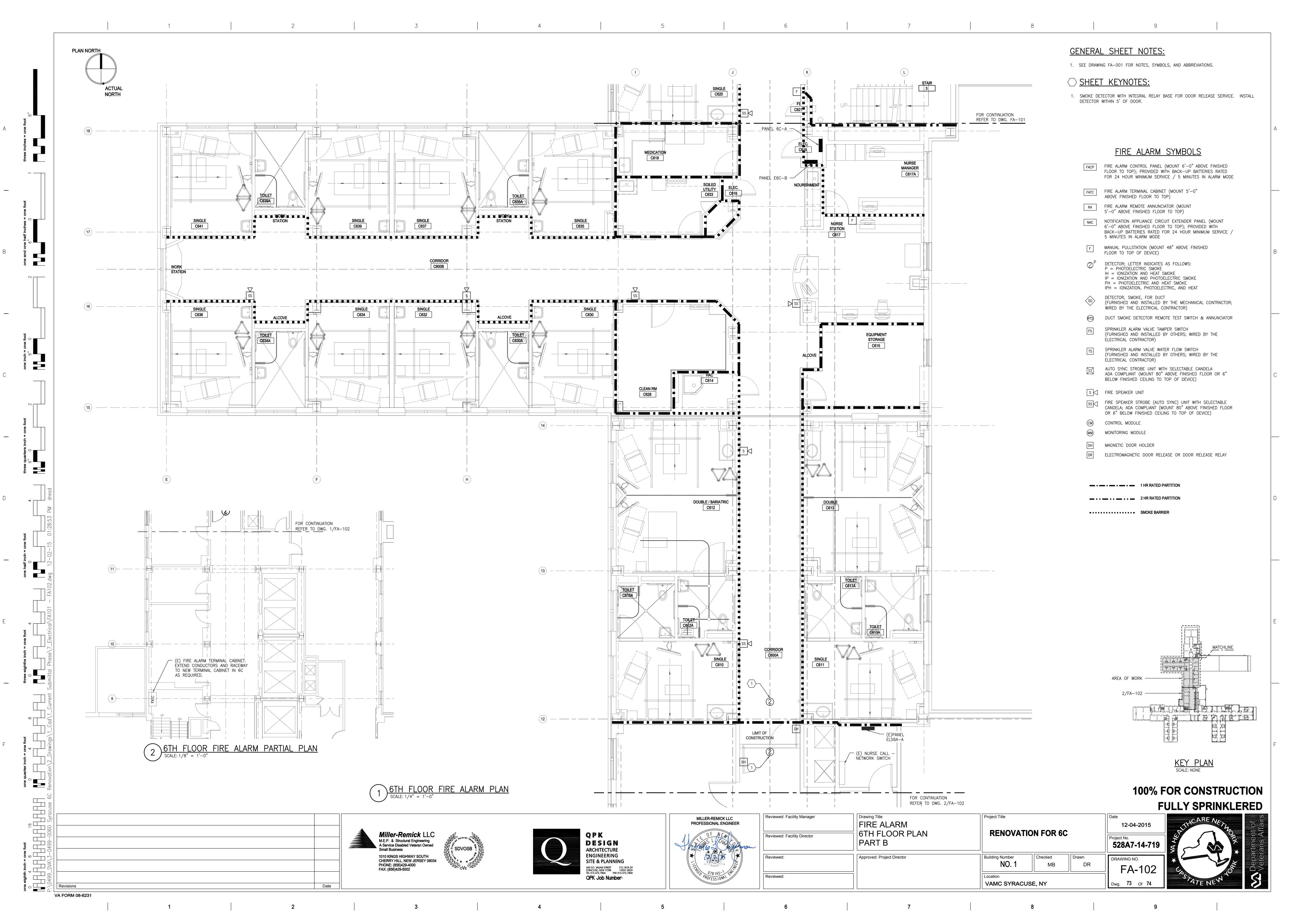
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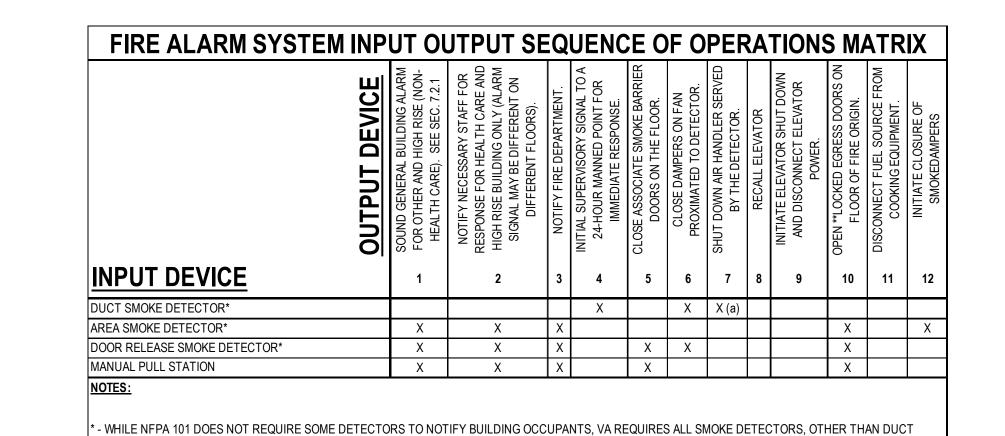
VAMC SYRACUSE, NY

Project Title







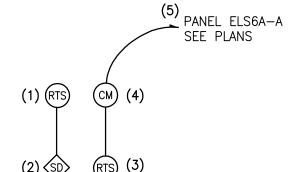


SEE FIRE ALARM RISER NOTES FOR MORE INFORMATION

DETECTORS, TO NOTIFY BUILDING OCCUPANTS. ONLY INSTALL SMOKE DETECTORS WHEN REQUIRED BY THE LIFE SAFETY CODE OR ITS REFERENCES.

- THOSE DOORS THAT ARE REQUIRED TO BE TIED TO THE FIRE ALARM SYSTEM SUCH AS DELAYED EGRESS AND ACCESS CONTROLLED DOORS.

(a) - DO NOT PROVIDE DUCT DETECTORS IN DEDICATED (100%) EXHAUST FANS, THEY SHOULD CONTINUE TO RUN.



COMBINATION FIRE / SMOKE DAMPER NOTES;

1. REMOTE INDICATING LIGHT WITH KEY SWITCH

DUCT DETECTOR

5. 120VAC EMERGENCY

3. FIRE ALARM CONTROL RELAY

4. ELECTRICALLY OPERATED ACTUATOR

3 COMBINATION FIRE/SMOKE DAMPER WIRING DIAGRAM

SEE FIRE ALARM RISER NOTES FOR MORE INFORMATION

FIRE ALARM SYMBOLS

- FIRE ALARM CONTROL PANEL (MOUNT 6'-0" ABOVE FINISHED FLOOR TO TOP); PROVIDED WITH BACK-UP BATTERIES RATED FOR 24 HOUR MINIMUM SERVICE / 5 MINUTES IN ALARM MODE
- FATC FIRE ALARM TERMINAL CABINET (MOUNT 5'-0"
  ABOVE FINISHED FLOOR TO TOP) ABOVE FINISHED FLOOR TO TOP)

5'-0" ABOVE FINISHED FLOOR TO TOP)

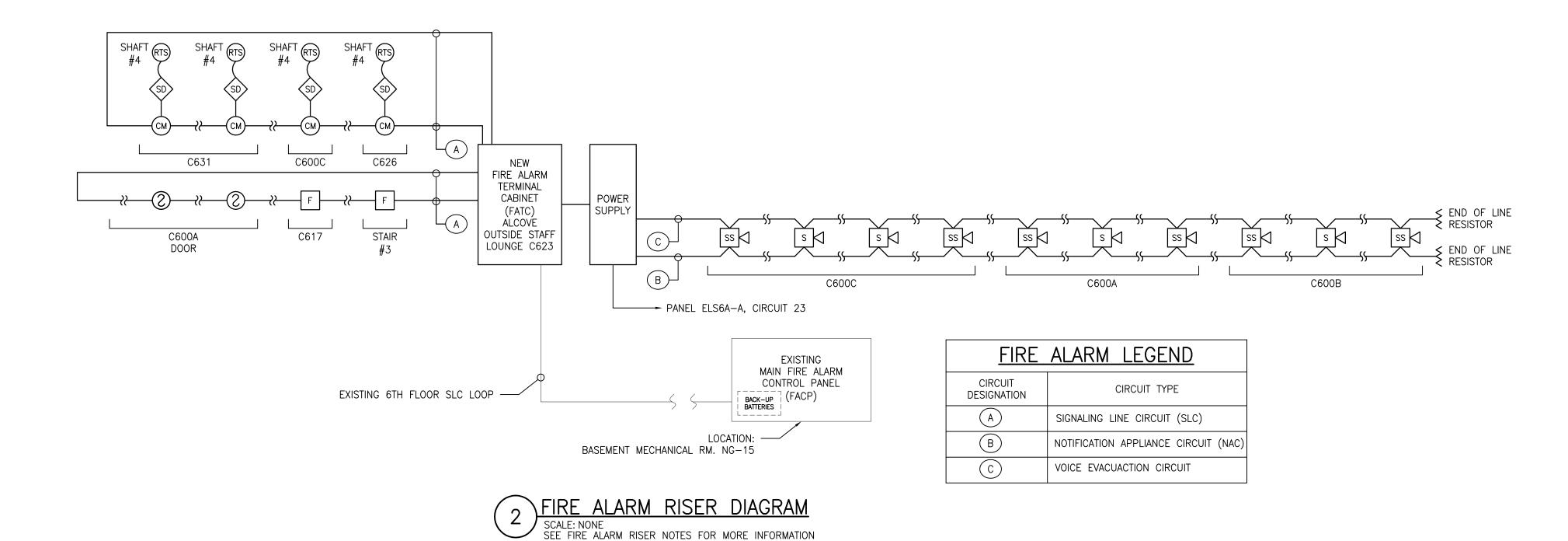
- RA FIRE ALARM REMOTE ANNUNCIATOR (MOUNT
- NOTIFICATION APPLIANCE CIRCUIT EXTENDER PANEL (MOUNT 6'-0" ABOVE FINISHED FLOOR TO TOP); PROVIDED WITH BACK-UP BATTERIES RATED FOR 24 HOUR MINIMUM SERVICE / 5 MINUTES IN ALARM MODE
- MANUAL PULLSTATION (MOUNT 48" ABOVE FINISHED FLOOR TO TOP OF DEVICE)
- DETECTOR; LETTER INDICATES AS FOLLOWS: P = PHOTOELECTRIC SMOKEIH = IONIZATION AND HEAT SMOKE IP = IONIZATION AND PHOTOELECTRIC SMOKE
- PH = PHOTOELECTRIC AND HEAT SMOKE IPH = IONIZATION, PHOTOELECTRIC, AND HEAT DETECTOR, SMOKE, FOR DUCT
- (FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR; WIRED BY THE ELECTRICAL CONTRACTOR)
- DUCT SMOKE DETECTOR REMOTE TEST SWITCH & ANNUNCIATOR
- SPRINKLER ALARM VALVE TAMPER SWITCH (FURNISHED AND INSTALLED BY OTHERS; WIRED BY THE ELECTRICAL CONTRACTOR)
- SPRINKLER ALARM VALVE WATER FLOW SWITCH (FURNISHED AND INSTALLED BY OTHERS; WIRED BY THE ELECTRICAL CONTRACTOR)
- AUTO SYNC STROBE UNIT WITH SELECTABLE CANDELA ADA COMPLIANT (MOUNT 80" ABOVE FINISHED FLOOR OR 6" BELOW FINISHED CEILING TO TOP OF DEVICE)
- s | FIRE SPEAKER UNIT
- FIRE SPEAKER STROBE (AUTO SYNC) UNIT WITH SELECTABLE

  CANDELA: ADA COMPLIANT (MOUNT 80" ABOVE FINISHED FLOO CANDELA; ADA COMPLIANT (MOUNT 80" ABOVE FINISHED FLOOR OR 6" BELOW FINISHED CEILING TO TOP OF DEVICE)
- CONTROL MODULE
- MONITORING MODULE
- MAGNETIC DOOR HOLDER
- ELECTROMAGNETIC DOOR RELEASE OR DOOR RELEASE RELAY

**GENERAL SHEET NOTES:** 

PROTECTIVE SYSTEM.

- 1. SEE DRAWING FA-001 FOR GENERAL NOTES, SYMBOLS AND ABBREVIATIONS.
- FIRE ALARM RISER NOTES:
- 1. THIS RISER IS INDICATIVE OF THE SYSTEM CONFIGURATION & SHALL NOT BE USED FOR QUANTIFYING DEVICE NUMBERS.
- 2. THE DWG. IS TO BE COORDINATED WITH ALL MECHANICAL, ELECTRICAL, ARCHITECTURAL, & STRUCTURAL DWGS.
- 3. MANUAL PULL STATIONS SHOWN AT EXIT DOORS SHALL BE WITHIN 5' OF SUCH DOORS (INSTALLED AT 48" AFL). MANUAL PULL STATIONS SHALL BE LOCATED WITH NO MORE THAN 200' BETWEEN STATIONS IN THE PATH OF EGRESS.
- 4. FIRE ALARM WIRING SHALL BE INSTALLED TO MEET THE SURVIVABILITY REQUIREMENTS FOR NOTIFICATION CIRCUITS. IT SHALL MEET UL2196 FIRE TEST STANDARDS & ARE CLASSIFIED AS 24HR. FIRE RATED ELECTRICAL CIRCUIT
- 5. RETURN LOOP SHALL NOT SHARE THE SAME CONDUIT AS THE OUTGOING LOOP.
- 6. RELAYS TO BE PROVIDED AS REQUIRED FOR MECHANICAL SYSTEM SHUTDOWN & CONTROL.
- 7. ALLOW A MIN. OF 15% SPARE CAPACITY FOR EACH LOOP UNLESS APPROVED BY OWNER.
- 8. FOR A SYSTEM MATRIX DEFINING THE INTERFACE OF THE FIRE SAFETY CONTROL FUNCTIONS, REFER TO FIRE ALARM SYSTEMS INPUT-OUTPUT SEQUENCE OF OPERATION MATRIX.
- 9. FIRE ALARM SYSTEM MODIFICATIONS REQUIRING SYSTEM DOWNLOAD MUST BE SCHEDULED AT LEAST 3 WEEKS IN ADVANCE WITH COR.



**100% FOR CONSTRUCTION FULLY SPRINKLERED** 



Date



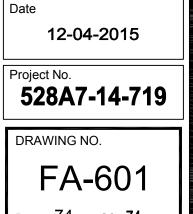




ER-REMICK LLC SIONAL ENGINEER	Reviewed: Facility Manager
SL. CHUZ	Reviewed: Facility Director
078145	Reviewed:
078145-1	Paviewed:
	I KONIOWOU.

Drawing Title	Project Title	
FIRE ALARM RISER DIAGRAM	RENOVAT	ON FOR 6
Approved: Project Director	Building Number	Checked
	Building Number NO. 1	МВ

6C





one eighth inch = one foot

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